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(54) SELECTIVE LASER ABLATION IN RESISTS AND BLOCK COPOLYMERS FOR HIGH RESOLUTION LITHOGRAPHIC **PATTERNING**

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(57)ABSTRACT

Various embodiments of the invention demonstrate selective laser ablation processes as a means to create a block copolymer derived lithographic pattern through the selective removal of one block. Three block copolymer systems described PS-b-PHOST, P2VP-b-PS-b-P2VP, and P2VP-b-PS-b-P2VP where the P2VP is infiltrated with platinum Pt. The selective laser ablation processes on block copolymers offers an alternative to plasma etching when plasma etching is not effective.

